

## **II. General Remarks Concerning This Response**

Claims are currently pending in the present application. Claims 3, 6, 10, 13, 17, and 20 have been amended; no claims have been added; and claims 1, 2, 5, 8, 9, 12, 15, 16, and 19 have been canceled in this response. Reconsideration of the claims is respectfully requested.

## **III. Summary of Present Invention**

A method, system, apparatus, and computer program product are presented for management of a distributed data processing system. Resources within the distributed data processing system are dynamically discovered, and the discovered resources are adaptively monitored using the network management framework. A network or system administrator configures some mission critical endpoints with multiple network interface cards (NICs) and specifies mission critical endpoints, non-mission critical actions, etc. During status collection activities associated with network or system management activities, the categorization of an endpoint as a mission-critical or non-mission critical endpoint affects the manner in which the status collection activity is performed. Applications can request the performance of actions at endpoints without regard to the categorization of the endpoint or without regard to the categorization of the requested action, and the network management system routes the action based on whether or not the specified endpoint is a mission critical endpoint. A non-mission-critical endpoint is associated with a mission-critical endpoint based on the non-mission-critical endpoint's communication history with the mission critical endpoint. The management system may use the status of a non-mission-critical endpoint as a reflection of the status of a mission-critical endpoint.

#### IV. 35 U.S.C. § 101-Double Patenting

The Office action has rejected claims 1-21 of the present patent application in an obviousness-type double patenting rejection over claims 1-24 of co-pending U.S. patent application 09/737,431, which is also assigned to IBM and has common co-inventors with the present application. This rejection is respectfully traversed.

MPEP § 804 states the following:

Since the analysis employed in an obviousness-type double patenting determination parallels the guidelines for a 35 U.S.C. 103(a) rejection, the factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103 are employed when making an obviousness-type double patenting analysis. ...

Any obviousness-type double patenting rejection should make clear:

(A) The differences between the inventions defined by the conflicting claims -- a claim in the patent compared to a claim in the application; and

(B) The reasons why a person of ordinary skill in the art would conclude that the invention defined in the claim in issue is an obvious variation of the invention defined in a claim in the patent.

The claims in the two patent applications clearly differ from each other. For example, the independent claims of the present patent application include an element similar to "first associating means for associating a mission critical twin endpoint with each mission critical endpoint"; this feature does not appear in the claims of the other patent application. In addition, the independent claims of the other patent application include an element similar to "assigning means for assigning a mission criticality characteristic to each discovered endpoint"; this element does not appear in the claims of the present patent application. The simple fact that the claims in the other

patent application may have common elements does not provide a basis for an obviousness-type double patenting rejection, particularly when the claims have different elements.

Moreover, the independent claims of the present patent application, as amended, include a feature of "choosing mission critical twin endpoints from a subset of discovered endpoints which have not been previously specified as twin endpoints". This claim element does not have an analogous or equivalent feature in the claims of the other patent application. Applicant requests the withdrawal of the double patenting rejection.

**V. 35 U.S.C. § 103(a)—Obviousness—Du in view of McBride**

The Office action has rejected claims 1-9 and 15-21 under 35 U.S.C. § 103(a) as unpatentable over Du et al., "Distributed workflow resource management system and method", U.S. Patent No. 5,826,239, filed 12/17/1996, issued 10/20/1998, in view of McBride et al., "Monitoring of a communication link utilizing history-based compression algorithms", U.S. Patent No. 6,151,627, filed 11/06/1998, issued 11/21/2000. The Office action erroneously stated that claims 1-9 and 15-21 were rejected under this grounds of rejection but then proceeded to argue only apparatus claims 8 and 9 and their corresponding method and computer program product claims. This grounds of rejection is moot in view of the fact that claims 1, 2, 8, 9, 15, and 16 have been canceled.

**VI. 35 U.S.C. § 103(a)—Obviousness—Du in view of McBride and Yamamoto**

The Office action has rejected claims 1-21 under 35 U.S.C. § 103(a) as unpatentable over Du et al., "Distributed workflow resource management system and method", U.S. Patent No.

5,826,239, filed 12/17/1996, issued 10/20/1998, in view of McBride et al., "Monitoring of a communication link utilizing history-based compression algorithms", U.S. Patent No. 6,151,627, filed 11/06/1998, issued 11/21/2000, and further in view of Yamamoto, "Method and system for switching between duplicated network interface adapters for host computer communications", U.S. Patent No. 6,049,825, filed 12/15/1997, issued 04/11/2000. This rejection is traversed.

The Office action begins by analyzing independent claim 10, which reads (as amended):

10. A apparatus for managing a distributed data processing system, the apparatus comprising:

configuring means for configuring monitoring parameters for network interface cards within the distributed data processing system using a network management framework;

discovering means for dynamically discovering a set of discovered endpoints within the distributed data processing system;

designating means for designating a plurality of discovered endpoints as mission critical endpoints;

first choosing means for choosing mission critical twin endpoints from a subset of discovered endpoints which have not been previously specified as twin endpoints; and

first associating means for associating a mission critical twin endpoint with each mission critical endpoint, wherein a mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated.

Du et al. does not explicitly disclose a discovering means as recited in claim 10, but Du et al. does disclose an SNMP (Simple Network Management Protocol) gateway, and it is well-known that an SNMP-compliant device would include a discovery means.

However, Applicant asserts that Du et al. does not disclose any features with respect to mission critical endpoints, as required by the third, fourth, and fifth elements of claim 10, notwithstanding the argument in the rejection to the contrary.

The rejection states that the third element of claim 10, i.e. "designating means for designating a plurality of discovered endpoints as mission critical endpoints", is disclosed at column 19, lines 50-67, which supposedly discloses "rules nodes with a list of condition-action rules". Assuming *arguendo* that Du et al. does disclose the feature of "rules nodes with a list of condition-action rules", this feature is clearly not equivalent nor analogous to a feature of designating discovered endpoints as mission critical endpoints. More importantly, Du et al. simply does not disclose the claimed feature; the cited portion of Du et al. states:

An OpenPM process is a directed graph comprising a set of nodes connected by arcs. There are two kinds of nodes: work nodes 41 and rule nodes 42. A work node defines work to be performed by external resources, while a rule node is used to define a process flow that is more complex than a simple sequence, such as concurrent process execution and synchronization of tasks. Process flows can also be controlled via events, which are raised and subscribed by rule nodes.

Du et al. clearly does not disclose anything concerning the designation of mission critical endpoints.

Applicant notes that the rejection fails to follow the proper form of an obviousness-type rejection in which a *prima facie* case of obviousness is logically explained by noting the deficient features of a primary prior art reference, by noting the teaching of the features in other prior art references, and then by noting the manner in which the teachings of the references could have been combined to reach the present invention. Instead, the rejection jumps to an argument that McBride et al. teaches a feature without noting that Du et al. fails to teach any particular features.

Specifically, the rejection states that the fifth element of claim 10, i.e. "associating a mission critical twin endpoint with each mission

critical endpoint, wherein a mission critical twin endpoint is a discovered endpoint that has a communication history with a mission critical endpoint with which the mission critical twin endpoint is being associated", is disclosed in the abstract of McBride et al., which reads:

5       The invention concerns in-line monitoring of a communication link between two stations in a frame-based communication network wherein the said two stations employ a compression algorithm for the transmission of frames and a corresponding decompression algorithm for the reception and decompression of the frames, the said algorithms requiring the maintenance at  
10   a transmitting station of a compression history in terms of the number of frames transmitted since a datum point and the maintenance of a corresponding compression history at a receiving station in terms of the number of frames received, the frames each including an identification of the compression sequence so that the receiving station can detect mismatch between the  
15   compression sequence and the receiving sequence. The monitoring method comprises detecting frames transmitted from one of the stations to the other, detecting whether frames are compressed, decompressing compressed frames and maintaining a compression history corresponding to that maintained by the receiving station.

20   The abstract of McBride et al. clearly does not disclose an equivalent nor analogous feature of associating a mission critical twin endpoint to another endpoint based on a communication history between the two endpoints.

25   Moreover, the rejection does not provide any argument as to how one having ordinary skill in the art would have been motivated to combine the teachings of Du et al. and McBride et al.. The rejection merely asserts that McBride et al. discloses a feature without explaining how this feature could have been  
30   incorporated into the system of Du et al..

      The rejection then argues that a hypothetical combination of Du et al. and McBride et al. does not teach the use of a twin endpoint, and the rejection argues that this feature is taught by Yamamoto in its abstract, a portion of which reads:

A method and system for switching between duplicated network adapters in order to provide a host computer with fault-tolerant functionality for TCP/IP communication with a plurality of other hosts over a network. A first host is equipped with a first and second network adapters, which constructs a hot standby system. When a fault of the first network adapter has been detected, the first host disconnects the first network adapter and activates the second network adapter.

Yamamoto discloses a system in which a network interface card can have a hot standby card; this feature requires that the standby card is previously designated as such and hardwired as such. In contrast, in the present invention, as clarified by the amendment of claim 10, a mission critical twin endpoint can be chosen from a subset of discovered endpoints which have not been previously specified as twin endpoints. In this manner, the present invention does not require the mission critical twin endpoint to be hardwired or pre-designated.

Dependent claims 11, 13, and 14 recite further limitations that are not present within independent claim 10 from which they depend. However, since the dependent claims incorporate the features of the independent claims, the rejections of the dependent claims are similarly deficient for the same reasons that were argued above with respect to the independent claim.

Independent claim 3 is directed to a method; claim 10 is directed to an apparatus; and claim 17 is directed to a computer program product. The Office action uses an obviousness argument against claims 1-7 and 15-21 by relying the arguments that are used against claims 8-14. Applicant's argument with respect to the rejection of claims 10, 11, 13, and 14 is similarly applicable against the rejection of the other claims.

Examiner bears the burden of establishing a prima facie case of obviousness

The examiner bears the burden of establishing a *prima facie* case of obviousness based on the prior art when rejecting claims under 35 U.S.C. § 103. *In re Fritch*, 972 F.2d 1260, 23 U.S.P.Q.2d 1780 (Fed. Cir. 1992). Only when a *prima facie* case of obviousness is established does the burden shift to the applicant to produce evidence of nonobviousness. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Rijckaert*, 9 F.3d 1531, 1532, 28 U.S.P.Q.2d 1955, 1956 (Fed. Cir. 1993). If the Patent Office does not produce a *prima facie* case of unpatentability, then without more the applicant is entitled to grant of a patent. *In re Oetiker*, 977 F.2d 1443, 1445, 24 U.S.P.Q.2d 1443, 1444 (Fed. Cir. 1992); *In re Grabiak*, 769 F.2d 729, 733, 226 U.S.P.Q. 870, 873 (Fed. Cir. 1985). In response to an assertion of obviousness by the Patent Office, the applicant may attack the Patent Office's *prima facie* determination as improperly made out, present objective evidence tending to support a conclusion of nonobviousness, or both. *In re Fritch*, 972 F.2d 1260, 1265, 23 U.S.P.Q.2d 1780, 1783 (Fed. Cir. 1992).

Du et al., McBride et al., and Yamamoto clearly fail to disclose at least one feature of the present invention as recited within each independent claim, notwithstanding the arguments presented by the Office action, thereby rendering Du et al., McBride et al., and Yamamoto incapable of being used as primary, secondary, and tertiary references as argued by the current rejection. Moreover, a hypothetical combination of Du et al., McBride et al., and Yamamoto would also fail to reach the claimed invention of the present patent application. As should be recognized, because the prior art references in the rejection fail to disclose the claimed features against which the references were applied, and because the references fail to



be combinable to produce these claimed features, the rejection fails to fulfill the requirements of a proper obviousness argument.

With respect to the claims of the present patent application, Applicant respectfully submits that it would not have been obvious for one having ordinary skill in the art to have used the applied prior art references to reach the claimed invention. Hence, a rejection of the claims cannot be based upon the cited prior art to establish a *prima facie* case of obviousness. Therefore, a rejection of the claims under 35 U.S.C. § 103(a) has been shown to be insupportable in view of the cited prior art, and the claims are patentable over the applied references. Applicant respectfully requests the withdrawal of the rejection of the claims.

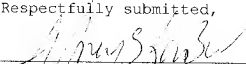
#### VII. Conclusion

It is respectfully urged that the present patent application is patentable, and Applicant kindly requests a Notice of Allowance.

For any other outstanding matters or issues, the examiner is urged to call or fax the below-listed telephone numbers to expedite the prosecution and examination of this application.

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Respectfully submitted,

  
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